

CLAIMS

What is claimed is:

1. A method for mapping platform-based design to multiple foundry processes, comprising:
 - (a) predefining a slice;
 - (b) mapping said slice onto a first fabrication process with a first set of design rules to produce a first result;
 - (c) evaluating said slice with a second fabrication process with a second set of design rules to produce a second result; and
 - (d) comparing said first result and said second result to produce a third result.
2. The method of claim 1, wherein said slice is a RapidSlice™.
3. The method of claim 1, wherein said step (d) is a hybrid analysis whereby evaluation of an element of said slice is discontinued when said element is established to be accessible in said second fabrication process.
4. The method of claim 1, wherein said step (d) is accomplished with a network-distributed processing system.
5. The method of claim 1, wherein said third result including at least one variable that is invariant in said platform-based design.
6. The method of claim 1, further comprising modifying said slice definition based on said third result.

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7. The method of claim 1, further comprising optimizing a metalization process giving a final function of said slice based on said third result.
8. The method of claim 1, further comprising modifying said first fabrication process based on said third result.
9. The method of claim 1, further comprising modifying said second fabrication process based on said third result.
10. The method of claim 1, further comprising storing said third result into a database.
11. The method of claim 1, further comprising optimizing platform architecture used to predefine said slice based on said third result.
12. The method of claim 11, further comprising optimizing temporal structure of interconnect of said platform architecture based on said third result.

13. An apparatus for mapping platform-based design to multiple foundry processes, comprising:

(a) means for predefining a slice;

(b) means for mapping said slice onto a first fabrication process with a first set of design rules to produce a first result;

(c) means for evaluating said slice with a second fabrication process with a second set of design rules to produce a second result; and

(d) means for comparing said first result and said second result to produce a third result.

14. The apparatus of claim 13, wherein said slice is a RapidSlice™.

15. The apparatus of claim 13, wherein said means (d) performs a hybrid analysis whereby evaluation of an element of said slice is discontinued when said element is established to be accessible in said second fabrication process.

16. The apparatus of claim 13, wherein said means (d) comprises a network-distributed processing system.

17. The apparatus of claim 13, wherein said third result including at least one variable that is invariant in said platform-based design.

18. The apparatus of claim 13, further comprising means for modifying said slice definition based on said third result.

19. The apparatus of claim 13, further comprising means for optimizing a metalization process giving a final function of said slice based on said third result.

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20. The apparatus of claim 13, further comprising means for modifying said first fabrication process based on said third result.
21. The apparatus of claim 13, further comprising means for modifying said second fabrication process based on said third result.
22. The apparatus of claim 13, further comprising means for storing said third result into a database.
23. The apparatus of claim 13, further comprising means for optimizing platform architecture used to predefine said slice based on said third result.
24. The apparatus of claim 23, further comprising means for optimizing temporal structure of interconnect of said platform architecture based on said third result.

25. A computer-readable medium having computer-executable instructions for performing a method for mapping platform-based design to multiple foundry processes, said method comprising steps of:

- (a) predefining a slice;
- (b) mapping said slice onto a first fabrication process with a first set of design rules to produce a first result;
- (c) evaluating said slice with a second fabrication process with a second set of design rules to produce a second result; and
- (d) comparing said first result and said second result to produce a third result.

26. The computer-readable medium of claim 25, wherein said slice is a RapidSlice™.

27. The computer-readable medium of claim 25, wherein said step (d) is a hybrid analysis whereby evaluation of an element of said slice is discontinued when said element is established to be accessible in said second fabrication process.

28. The computer-readable medium of claim 25, wherein said step (d) is accomplished with a network-distributed processing system.

29. The computer-readable medium of claim 25, wherein said third result including at least one variable that is invariant in said platform-based design.

30. The computer-readable medium of claim 25, wherein said method further comprising modifying said slice definition based on said third result.

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31. The computer-readable medium of claim 25, wherein said method further comprising optimizing a metalization process giving a final function of said slice based on said third result.

32. The computer-readable medium of claim 25, wherein said method further comprising modifying said first fabrication process based on said third result.

33. The computer-readable medium of claim 25, wherein said method further comprising modifying said second fabrication process based on said third result.

34. The computer-readable medium of claim 25, wherein said method further comprising storing said third result into a database.

35. The computer-readable medium of claim 25, wherein said method further comprising optimizing platform architecture used to predefine said slice based on said third result.

36. The computer-readable medium of claim 35, wherein said method further comprising optimizing temporal structure of interconnect of said platform architecture based on said third result.

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37. A computer-readable medium having stored thereon a database having a data structure, said data structure comprising:

- (a) a first field containing data representing a slice definition;
- (b) a second field containing data representing a first set of design rules with which said slice definition is mapped to a first fabrication process;
- (c) a third field containing data representing a second set of design rules with which said slice definition is mapped to a second fabrication process; and
- (d) a fourth field containing data representing a result of computed comparison between results of said two mappings.

38. The computer-readable medium of claim 37, wherein said slice is a RapidSlice™.

39. The computer-readable medium of claim 37, wherein said result of computed comparison includes at least one variable that is invariant in platform-based design used to provide said slice definition.

40. The computer-readable medium of claim 37, wherein said database is used to modify said slice definition.

41. The computer-readable medium of claim 37, wherein said database is used to optimize a metalization process giving a final function of said slice definition.

42. The computer-readable medium of claim 37, wherein said database is used to modify said first fabrication process.

43. The computer-readable medium of claim 37, wherein said database is used to modify said second fabrication process.

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44. The computer-readable medium of claim 37, wherein said database is used to optimize platform architecture used to provide said slice definition.

45. The computer-readable medium of claim 44, wherein said database is used to optimize temporal structure of interconnect of said platform architecture.